

Key Idea 6 Standard 4 Review Sheet/Living Environment

The head of the arrow in a food chain points toward _____

Organisms which carry on _____ such as green plants or algae are called _____ or _____.

_____ or heterotrophs depend on other organisms for their food.

_____ -- eat predominantly plant matter

_____ -- eat predominantly animal matter

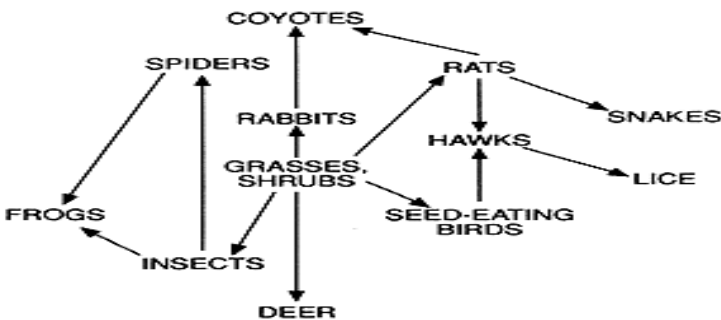
_____ -- eat both plant and animal matter

List two reasons decomposers are needed in any ecosystem.

a.) _____

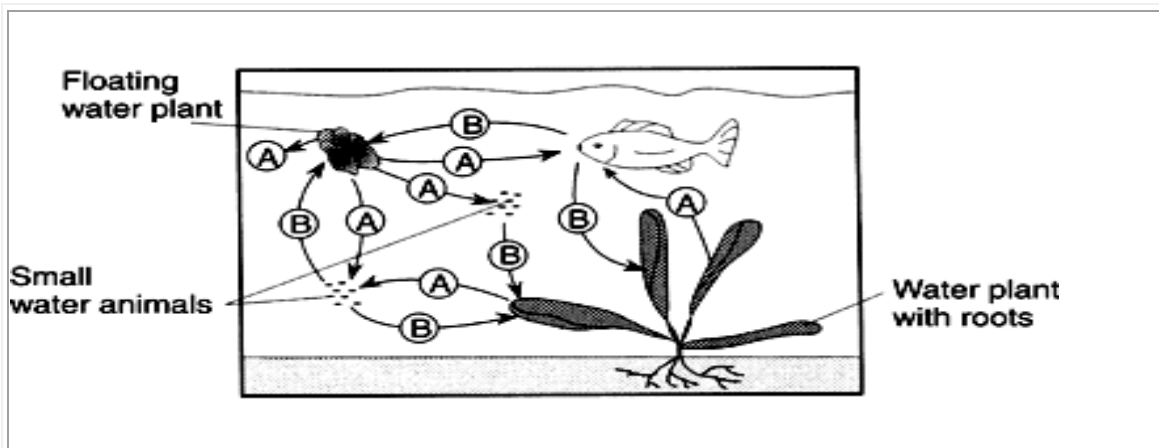
b.) _____

The graphic below is that of a food web. Explain the difference between a food chain and a food web.



Why is a food web usually a better representation of feeding relationships in an ecosystem than a food chain?

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1. What gas is being given off that is represented by arrow A and what life process is responsible for its release?

2. What gas is being given off represented by arrow B and what life process is responsible for its release?

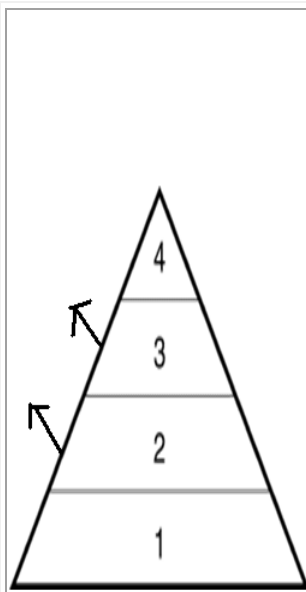
3. When do plants carry on cell respiration?

How does each of the following keep the size of a population from growing?

a. Competition

b. Predators

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Identify the levels on the energy pyramid at the left.

1 =

2 =

3 =

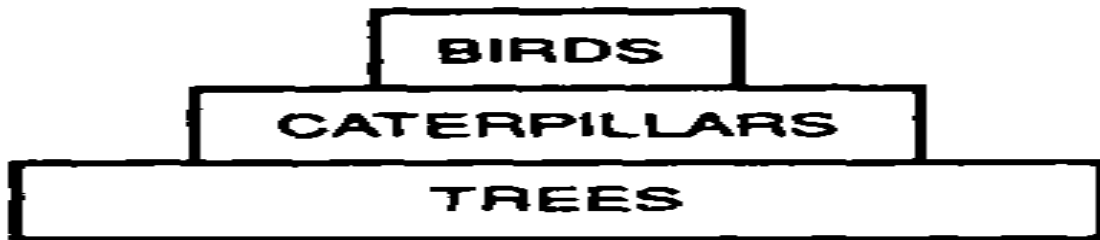
4 =

What do the arrows represent? _____

How much energy on average is lost between steps of this energy pyramid? _____ %

Where does this waste energy go? _____

Why doesn't this energy pyramid run out of energy?



There are always more _____ organisms than consumers in any stable ecosystem.

_____ -- is the maximum number of organisms the resources of the environment can support

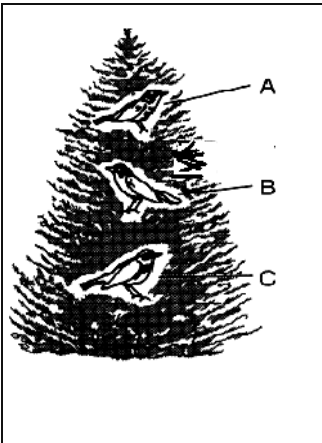
Explain how oxygen limits the number of organism that can live in an aquatic environment.

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Why does the available water limit the number of organisms in an environment, even if all the animals have enough to drink?

List two examples of decomposers. _____

What is competition?

	<p>** No _____ organisms can occupy the same ecological _____.</p> <p>Feeding on different foods may also allow different species to occupy different niches.</p> <p>How does the principle illustrated by this pictured example relate to competition?</p> <hr/>
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Explain how these factors influence the growth/distribution of organisms in an ecosystem.

Factor	Influence on some ecosystem organisms
Light intensity	
Temperature range	
relative acidity (pH)	

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What is the difference between a biotic and an abiotic factor which limits the growth of a population?

_____ -- is the place an organism lives

_____ --is the role of an organism in its ecosystem
(especially its feeding role)

_____ factor: Anything in short supply which restricts the size of a population

Finite resources mean that population sizes can not _____ forever.

List an example of a producer/consumer relationship.

_____ -- an organism which kills and eats its food

_____ -- feeds on animals which have already been killed

_____ --- the organism devoured by a predator

_____ -- a close living association where one member of the
association is helped while the other is harmed

_____ -- provides food for the parasite

List an example of a parasite/host relationship _____

Explain the difference between mutualism and parasitism.

_____ -- refers to the differences between species and
the variations within species in an ecosystem

Why does increased biodiversity increase the stability of an ecosystem?

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List three reasons humans should be concerned with preserving biodiversity.

a.) _____

b.) _____

c.) _____

How does increased biodiversity relate to Darwin's theory of natural selection?

Why are monocultures vulnerable to being wiped out and becoming extinct?

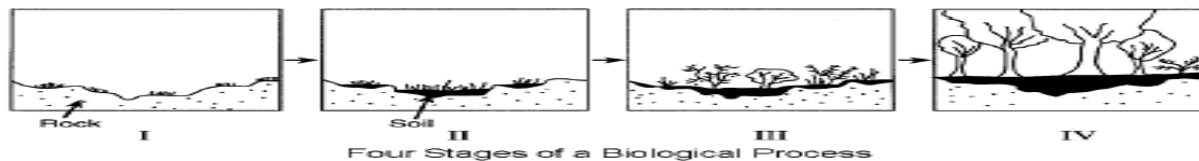
In order to have a stable ecosystem there must be:

a.) An input of _____

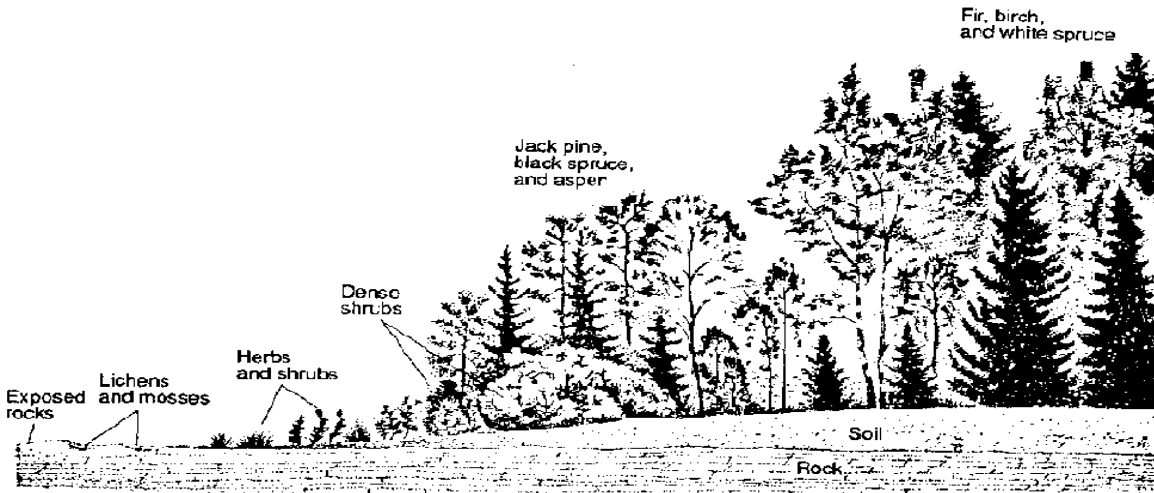
b.) A way of converting solar energy and inorganic to organic compounds. This process is usually called _____.

c.) A _____ of materials through the ecosystem.

_____ -- is a gradual change in an ecosystem over time



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_____ -- are the first organisms in a succession ex. _____

_____ -- is the final stable plant community in a succession

List two major environmental changes that commonly disrupt stable New York State ecosystems.

If most of the Adirondack forest park forests burned down, what community of plants would like reestablish itself after 100 years.

List the stages of an old field succession

a.) _____

c. _____

b.) _____

d. _____